February 9, 2004

## **AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listing, of claims in the application.

 (Currently amended) A method of adding interactive functionality to a web-page comprising:

- (a) receiving a request for the web-page from a first user;
- (b) retrieving the requested web-page;
- (e) adding embedding script code to within the requested web-page to add interactive functionality to the web-page; and
- (d) transmitting the requested web-page and having the embedded script code to the first user.

2. (Currently amended) A method as recited by claim 1, further comprising:

receiving a request for the <u>requested</u> web-page from <u>another</u> <u>a second</u> user; <u>and</u> retrieving the requested web-page;

adding-script code to the requested web-page to add-interactive functionality to the

web-page; and

another second user, the script code enabling the <u>first</u> user and the <u>another second</u> user to interact with each other while viewing the <u>requested</u> web-page.

(i)

February 9, 2004

3. (Currently amended) A method as recited by claim 1, wherein said embedding step (e) comprises parsing the web-page to determine an appropriate location to add embed the script code.

4. (Original) A method as recited by claim 3, wherein the web-page includes a header and wherein the appropriate location is in the header.

 $\bigcirc \mathcal{V}$ 

5. (Currently amended) A method as recited by claim 2, wherein said <u>embedding</u> step (e) comprises parsing the web-page to determine an appropriate location to add <u>embed</u> the script code.

- 6. (Original) A method as recited by claim 5, wherein the web-page includes a header and wherein the appropriate location is in the header.
- 7. (Currently amended) A method as recited by claim 1, wherein said receiving step (a) comprises:

receiving a data file from the user including first user account data from the first user and web-page identification data; and

determining, based on the first user account data, if the first user is authorized to access the requested web-page.

February 9, 2004

8. (Currently amended) A method as recited by claim 2, wherein said receiving step comprises:

receiving a data-file from the another user including second user account data from the second user and web-page identification data; and

determining, based on the second user account data, if the another second user is authorized to access the requested web-page.

9. (Currently amended) A method as recited by claim 2, wherein each of the <u>first</u> user and the <u>another second</u> user have a computinger <u>device</u> having a display on which the web-page is displayed, <u>each the first</u> user's computinger <u>device</u> having a cursor control device to control movement of a cursor on <u>each the first</u> user's display, <u>and wherein each user's cursor is unique</u> and appears on the other user's web-page, and wherein the web-page includes a plurality of <u>elements</u>, and wherein the script code <u>added to embedded within</u> each user's web-page adds interactive functionality to the web page by: <u>displaying one or more movements of the first user's</u> cursor on the web-page of the second user.

assigning a unique identifier to each element in the web-page; storing in memory a tree of each unique identifier;

determining a user's cursor position by intercepting cursor coordinates to provide eursor coordinate data as the users causes the cursor to move over the web-page;

February 9, 2004

comparing the cursor coordinate data with the tree to determine the element over which the user's cursor is positioned; and

transmitting the cursor coordinate data and unique identifier for the element overwhich the user's cursor is positioned to the other user.

10. (Currently amended) A method as recited by claim 29, wherein the script code added to each user's web-page each of the first user and the second user have a computing device having a display on which the web-page is displayed, and wherein the script code embedded within the web-page of the first user and the second user adds interactive functionality to the web-page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the identifier of the particular element that is the subject of actions by the first user;

locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.

receiving the cursor coordinate data and unique identifier from the other user;

comparing the cursor coordinate data and unique identifier with the tree to

determine the element over which to position the other user's cursor; and

positioning the other user's cursor over the element.

NJ-

February 9, 2004

11. (Currently amended) A method of facilitating and monitoring interaction between a first user viewing a web-page and a second user viewing the web-page, said method comprising:

(a) providing the web-page to each of the first and second user, the web-page having embedded script code to provide interactive functionality to the web-page;

(b) receiving cursor <u>coordinate</u> data from one of the first and <u>or</u> second user; and

(e) transmitting the received cursor <u>coordinate</u> data to the other one of the first and <u>or</u> second user.

12. (Currently amended) A method as recited by claim 11, wherein the cursor <u>coordinate</u> data is <del>one of</del> point data <del>and</del> or draw data.

13. (Currently amended) A method as recited by claim 11, further comprising transmitting to each one of the first and or the second user, an identity for the other one of the first and or the second user.

14. (Original) A method as recited by claim 11, wherein the first and second users are participants in a session, said method further comprising:

- 8 -

determining if a new user has joined the session; and transmitting to each user participating in the session, an identity for the new user.

February 9, 2004

15. (Original) A method as recited by claim 11, wherein the first and second users are participants in a session, said method further comprising:

determining if a user has left the session; and

transmitting to each user participating in the session, an identity for the user that has left the session.

16. (Currently amended) A system for adding interactive functionality to a web-page requested by a first user having a computinger device connectable to the Internet using an Internet browser stored on a data storage device of the first user's computinger device, the Internet browser enabling the first user to cause the computinger device to establish a connection to the Internet and to request and receive web-pages, said system comprising:

a server having a processor, the first user computinger device being selectivelyconnectable to said server using the Internet browser, said processor server being operable in
connection with software loaded on the server for receiving a request from the first user for the
web-page, said processor server further being operable in connection with the software for
retrieving the requested web-page and adding embedding script code to within the requested
web-page to add interactive functionality to the web-page, said processor server further being
operable in connection with the software for transmitting the requested web-page and added
having the embedded script code to the first user's computinger device.

February 9, 2004

17. (Currently amended) A system as recited by claim 16, wherein said processor server is further operable in connection with the software on said server for receiving a request for the web-page from a second user having a computinger device connectable to the Internet using an Internet browser stored on a data storage device of the second user's computinger device, the Internet browser enabling the second user to cause the computinger device to establish a connection to the Internet and to request and receive web-pages, said processor is further operable in connection with the software on said server for retrieving the requested web-page, said processor further being operable in connection with the software for retrieving the requested web-page and adding script code to the requested web-page to add interactive functionality to the web-page, said processor server being is further operable in connection with the software on said server for transmitting the requested web-page and having the embedded script code to the second user's computinger device, the script code enabling the first user and the second user to interact with each other while viewing the web-page.

- 18. (Currently amended) A system as recited by claim 16, wherein said processor server is further operable in connection with the software for parsing the web-page to determine an appropriate location to add embed the script code.
- 19. (Currently amended) A system as recited by claim 17, wherein said processor server is further operable in connection with the software for parsing the web-page to determine an appropriate location to add embed the script code.

February 9, 2004

- 20. (Currently amended) A system as recited by claim 16, wherein said processor server is further operable in connection with the software for receiving a data file from the first user including first user account data from the first user and web page identification data, and wherein said processor server is further operable in connection with the software for determining if the first user is authorized to access the requested web-page.
- 21. (Currently amended) A system as recited by claim 17, wherein said processor server is further operable in connection with the software for receiving a data file from the second user including second user account data from the second user and web-page identification data, wherein said processor server is further operable in connection with the software for determining if the second user is authorized to access the requested web-page.
- 22. (Currently amended) A system as recited by claim 17, wherein each of the <u>first user's computing device</u> and <u>the second user's computinger device</u> has a cursor control device to control movement of a cursor on a display of each of the first <u>user's computing device</u> and <u>the second user's computinger device</u>, and <u>wherein each of the first and second user's cursor is unique and appears on the other display of the other user's computer, and wherein the web page includes a plurality of elements, wherein said processor server is further operable in connection with the software for adding interactive functionality to the web page by adding embedding script code to within the web-page to display one or more movements of the first user's cursor on the web-page</u>

February 9, 2004

of the second user. for assigning a unique identifier to each element in the web page, storing in memory a tree of each unique identifier, determining a cursor position for each of the first and second user's cursor by intercepting cursor coordinates to provide cursor coordinate data as each of the first and second user causes their cursor to move over the web-page, comparing the cursor coordinate data with the tree to determine the element over which each of the first and second user's cursor is positioned, and transmitting the cursor coordinate data and unique identifier for the element over which each of the first and second user's cursor is positioned to the other user.

23. (Currently amended) A system as recited by claim <u>17</u> 22, wherein said <del>processor</del> <u>server</u> and said script code are is further operable in connection with the software for adding interactive functionality to the web page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the identifier of the particular element that is the subject of actions by the first user;

locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.

adding script code to the web page for receiving the cursor coordinate data and unique identifier from the other user, comparing the cursor coordinate data and unique identifier with the tree to

February 9, 2004

determine the element over which to position the other user's cursor, and positioning the other user's cursor over the element.

24. (Currently amended) A system for facilitating and monitoring interaction between a first user viewing a web-page and a second user viewing the web-page, said system comprising:

a server having a processor operable in connection with software loaded on the server for providing the web-page to each of the first <u>user</u> and <u>the</u> second user, the web-page having <u>embedded</u> script code to provide interactive functionality to the web-page, said <del>processor</del> <u>server</u> and <u>said script code</u> being further operable in connection with the software for receiving cursor <u>coordinate</u> data from one of the first <u>and or</u> second user, said <del>processor</del> <u>server and said script</u> <u>code</u> being further operable in connection with the software for transmitting the received cursor <u>coordinate</u> data to the other one of the first <u>and or</u> second user.

- 25. (Currently amended) The system as recited by claim 24, wherein the cursor <u>coordinate</u> data is <del>one of</del> point data <del>and</del> <u>or</u> draw data.
- 26. (Currently amended) The system as recited by claim 24, wherein said processor server is further operable in connection with software for transmitting to each one of the first user and or the second user, an identity for the other one of the first user and or the second user.

February 9, 2004

27. (Currently amended) A system as recited by claim 24, wherein the first and second users are participants in a session, said processor server being further operable in connection with software for determining if a new user has joined the session, and transmitting to each user participating in the session, an identity for the new user.

28. (Currently amended) A system as recited by claim 24, wherein the first and second users are participants in a session, said processor server being further operable in connection with software for determining if a user has left the session, and transmitting to each user participating in the session, an identity for the user that has left the session.

4

- 29. (Currently amended) A computer readable medium comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:
  - (a) receiving a request for the web-page from a first user;
  - (b) retrieving the requested web-page;
- (e) adding embedding script code to within the requested web-page to add interactive functionality to the web-page; and
- (d) transmitting the requested web-page and having the embedded script code to the first user.

February 9, 2004

30. (Currently amended) A computer readable medium as recited by claim 29, further comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:

- (e) receiving a request for the requested web-page from another a second user; and
- (f) retrieving the requested web page;
- (g) adding-script code to the requested web-page to add interactive functionality to the web-page; and
- (h) transmitting the requested web-page and having the embedded script code to the another second user, the script code enabling the <u>first</u> user and the another second user to interact with each other while viewing the <u>requested</u> web-page.
- 31. (Currently amended) A computer readable medium comprising computer code for instructing one or more processors to facilitate and-monitor interaction between a first user viewing a web-page and a second user viewing the same web-page by:
- (a) providing the web-page to each of the first <u>user</u> and <u>the</u> second user, the web-page having <u>embedded</u> script code to provide interactive functionality to the web-page;
- (b) receiving cursor coordinate data from one of the first <u>user and or the</u> second user; and
- (e) transmitting the received cursor <u>coordinate</u> data to the other one of the first and <u>or</u> the second user.

February 9, 2004

32. (New) A method as recited by claim 1, wherein the embedding step further comprises storing the script code on a computing device of the first user prior to embedding the script code within the requested web-page.

33. (New) A method as recited by claim 32, wherein the storing step further comprises

downloading the script code for storage on the computing device.

34. (New) A method as recited by claim 2, wherein the embedding step further comprises storing the script code on a computing device of at least one of the first user and the second user prior to embedding the script code within the requested web-page.

- 35. (New) A method as recited by claim 34, wherein the storing step further comprises downloading the script code for storage on the computing device.
- 36. (New) A method as recited by claim 9, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and

transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first user's cursor position on the displayed web page.

February 9, 2004

37. (New) A method as recited by claim 36, wherein the cursor coordinate data is point data or draw data.

38. (New) A method as recited by claim 37, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.

 $\left( \int_{0}^{h} \right)$ 

39. (New) A method as recited by claim 37, wherein the script code further enables the first user to switch between point mode and draw mode.

40. (New) A method as recited by claim 9, wherein the second user's computing device has a cursor control device to control movement of a cursor on the second user's display, and wherein the script code embedded within the web-page of the first user and the second user further adds interactive functionality to the web page by displaying one or more movements of the second user's cursor on the web-page of the first user.

41. (New) A method as recited by claim 40, wherein the one or more movements of each user's cursor are displayed on the web page of the other user by:

determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and

February 9, 2004

transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that the other user can perceive each user's cursor position on the displayed web page.

42. (New) A method as recited by claim 41, wherein the cursor coordinate data is point data or draw data.

43. (New) A method as recited by claim 42, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.

- 44. (New) A method as recited by claim 42, wherein the script code further enables the first and second user to switch between point mode and draw mode.
- 45. (New) A method as recited by claim 10, further comprising storing information regarding the relationship between the elements and the identifiers on the computing device of the first user and the second user.
- 46. (New) A method as recited by claim 10, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page, and the one or more HTML tags is assigned a unique identifier.

February 9, 2004

47. (New) A method as recited by claim 10, wherein at least one element on the web-page is characterized by a bounding shape defined by the script code, and wherein the shape provides a reference point from which various parts of the element may be located on the web-page.

48. (New) A method as recited by claim 10, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

49. (New) A method as recited by claim 10, wherein the script code embedded within each user's web-page further adds interactive functionality to the web-page by:

determining the identifier of the particular element that is the subject of actions by the second user;

transmitting the identifier from the second user's computing device to the first user's computing device; and

locating the element corresponding to the identifier received from the second user's computing device on the first user's web page, so that actions of the second user can be communicated to the first user.

February 9, 2004

50. (New) A method as recited by claim 9, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

storing each identifier;

determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page;

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the first user's cursor is positioned;

transmitting the cursor coordinate data and identifier for the element over which the first user's cursor is positioned to the second user's computing device; and

locating the corresponding element on the second user's web page by using the identifier, so that the second user can perceive the first user's cursor position on the displayed web-page.

51. (New) A method as recited by claim 50, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing

February 9, 2004

the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

52. (New) A method as recited by claim 51, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.

53. (New) A method as recited by claim 50, wherein one or more movements of the second user's cursor are displayed on the first user's web page by:

determining the second user's cursor position by obtaining cursor coordinate data as the second user causes the cursor to move over the displayed web-page;

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the second user's cursor is positioned;

transmitting the cursor coordinate data and identifier for the element over which the second user's cursor is positioned to the first user's computing device; and

locating the element corresponding to the identifier received from the second user's computing device on the first user's web-page, so that the first user can perceive the second user's cursor position on the displayed web-page.

(New) A method of claim 11, displaying one or more movements of one of the first user's cursor or the second user's cursor on the web-page of the other user.

February 9, 2004

55. (New) A method as recited by claim 54, wherein the received cursor coordinate data is one of the first user's cursor position or the second user's cursor position as the one of the first user or the second user causes the cursor to move over the displayed web-page.

56. (New) A method of claim 12, wherein said draw data permits one of the first user or the second user to perceive drawing performed by the other one of the first user or the second user.

57. (New) A method of claim 11, further comprising:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the one of the first user's cursor position or the second user's cursor position from the received cursor coordinate data as the one of the first user or the second user causes the cursor to move over the displayed web-page;

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the one of the first user's cursor or the second user's cursor is positioned; and

locating the corresponding element on the other one of the first user's web page or the second user's web page by using the identifier, so that the other one of the first user or the second user can perceive the cursor position on the displayed web-page.

February 9, 2004

58. (New) A method as recited by claim 57, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.



- 59. (New) A method as recited by claim 57, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.
- 60. (New) A method as recited by claim 11, further comprises storing the script code on a computing device of at least one of the first user or the second user prior to embedding the script code within the requested web-page.
- 61. (New) A method as recited by claim 60, wherein the storing step further comprises downloading the script code for storage on the computing device.
- 62. (New) A system as recited by claim 22, wherein said server and said script code are further operable in connection with the software to:

February 9, 2004

analyze the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

store each identifier;

determine the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page;

compare the cursor coordinate data with the stored one or more identifiers to determine the element over which the first user's cursor is positioned;

()

transmit the cursor coordinate data and identifier for the element over which the first user's cursor is positioned to the second user's computing device; and

locate the corresponding element on the second user's web page by using the identifier, so that the second user can perceive the first user's cursor position on the displayed web-page.

63. (New) A system as recited by claim 62, wherein said server and said script code are further operable in connection with the software to construct a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and store the tree in a data file on the computing device of the first user and the second user, and compare the cursor coordinate data with the stored tree, and parse the tree to locate the element corresponding to the identifier.

February 9, 2004

(New) A system as recited by claim 63, wherein one or more elements is identifiable by 64. one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.

65. (New) A system as recited by claim 62, wherein said server and said script code are further operable in connection with the software to:

determine the second user's cursor position by obtaining cursor coordinate data as the second user causes the cursor to move over the displayed web-page;

compare the cursor coordinate data with the stored one or more identifiers to determine the element over which the second user's cursor is positioned;

transmit the cursor coordinate data and identifier for the element over which the second user's cursor is positioned to the first user's computing device; and

locate the element corresponding to the identifier received from the second user's computing device on the first user's web-page, so that the first user can perceive the second user's cursor position on the displayed web-page.

66. (New) A system as recited by claim 22, wherein said server and said script code are further operable in connection with the software to display the one or more movements of the first user's cursor on the second user's web page by:

determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and

- 25 -

February 9, 2004

transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first user's cursor position on the displayed web page.

- 67. (New) A system as recited by claim 66, wherein the cursor coordinate data is point data or draw data.
- 68. (New) A system as recited by claim 67, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.
- 69. (New) A system as recited by claim 22, wherein said server is further operable in connection with the software for adding interactive functionality to the web page by embedding script code within the web-page to display one or more movements of the second user's cursor on the web-page of the first user.
- 70. (New) A system as recited by claim 69, wherein said server and said script code are further operable in connection with the software to display the one or more movements of each user's cursor on the web page of the other user by:

determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and

February 9, 2004

transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that each user can perceive the other user's cursor position on the displayed web page.

- 71. (New) A system as recited by claim 70, wherein the cursor coordinate data is point data or draw data.
- 72. (New) A system as recited by claim 71, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.
- 73. (New) A system as recited by claim 22, wherein said server is further operable in connection with the software to store the script code on a computing device of one of the first user or the second user prior to embedding the script code within the requested web-page.
- 74. (New) A system as recited by claim 73, wherein the script code is downloaded for storage on the computing device.
- 75. (New) A method of adding interactive functionality to a web-page comprising:

  receiving a request for the web-page from a first user;

  retrieving the requested web page;

February 9, 2004

inserting, within the requested web-page, a reference to script code to add interactive functionality to the requested web-page; and

transmitting the requested web-page having the inserted reference to the first user.

76. (New) A method as recited by claim 75, further comprising:

receiving a request for the requested web-page from a second user; and transmitting the requested web-page having the inserted reference to the second user, the script code enabling the first user and the second user to interact with each other while viewing the requested web-page.



- 77 (New) A method as recited by claim 75, further comprising using the reference to embed the script code within the requested web page.
- 78. (New) A method as recited by claim 75, wherein said inserting step comprises parsing the web-page to determine an appropriate location to insert the reference.
- 79. (New) A method as recited by claim 78, wherein the web-page includes a header and wherein the appropriate location is in the header.
- 80. (New) A method as recited by claim 76, further comprising using the reference to embed the script code within the requested web page.

February 9, 2004

- 81. (New) A method as recited by claim 76, wherein said inserting step comprises parsing the web-page to determine an appropriate location to insert the reference.
- 82. (New) A method as recited by claim 80, wherein the web-page includes a header and wherein the appropriate location is in the header.
- 83. (New) A method as recited by claim 75, wherein said receiving step comprises:

  receiving first user account data from the first user; and

  determining, based on the first user account data, if the first user is authorized to
  access the requested web-page.
- 84. (New) A method as recited by claim 76, wherein said receiving step comprises:

  receiving second user account data from the second user; and

  determining, based on the second user account data, if the second user is

  authorized to access the requested web-page.
- 85. (New) A method as recited by claim 80, further comprising storing the script code on at least one of the first user's computing device and the second user's computing device prior to using the reference to embed the script code within the requested web-page.

February 9, 2004

86. (New) A method as recited by claim 85, wherein the storing step further comprises downloading the script code for storage on the computing device.

87. (New) A method as recited by claim 80, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display and wherein the script code embedded within each user's web-page adds interactive functionality to the web page by displaying one or more movements of the first user's cursor on the web-page of the second user.

()<sup>h</sup>)

88. (New) A method as recited by claim 87, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page; and

transmitting the cursor coordinate data over which the first user's cursor is positioned to the second user so that the second user can perceive the first user's cursor position on the displayed web page.

89. (New) A method as recited by claim 88, wherein the cursor coordinate data is point data or draw data.

February 9, 2004

90. (New) A method as recited by claim 89, wherein said draw data permits the second user to perceive drawing on the web-page performed by the first user.

91. (New) A method as recited by claim 89, wherein the script code further enables the first user to switch between point mode and draw mode.

92. (New) A method as recited by claim 87, wherein the second user's computing device has a cursor control device to control movement of a cursor on the second user's display, and wherein the script code embedded within the web-page of the first user and the second user further adds interactive functionality to the web page by displaying one or more movements of the second user's cursor on the web-page of the first user.

93. (New) A method as recited by claim 92, wherein the one or more movements of each user's cursor are displayed on the web page of the other user by:

determining each user's cursor position by obtaining cursor coordinate data as each user causes the cursor to move over the displayed web-page; and

transmitting the cursor coordinate data over which each user's cursor is positioned to the other user so that each user can perceive the other user's cursor position on the displayed web page.

February 9, 2004

94. (New) A method as recited by claim 93, wherein the cursor coordinate data is point data or draw data.

95. (New) A method as recited by claim 94, wherein said draw data permits the first and second user to perceive drawing on the web-page performed by the other user.

96. (New) A method as recited by claim 94, wherein the script code further enables the first and second user to switch between point mode and draw mode.

()

97. (New) A method as recited by claim 80, wherein each of the first user and the second user have a computing device having a display on which the web-page is displayed, and wherein the script code embedded within web-page of the first user and the second user adds interactive functionality to the web-page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

determining the identifier of the particular element that is the subject of actions by the first user;

transmitting the identifier to the second user's computing device; and locating the corresponding element on the second user's web page by using the identifier, so that the actions of the first user can be communicated to the second user.

February 9, 2004

98. (New) A method as recited by claim 97, further comprising storing information regarding the relationship between the elements and the identifiers on the computing device of the first user and the second user.

99. (New) A method as recited by claim 97, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page, and the one or more HTML tags is assigned a unique identifier.

100. (New) A method as recited by claim 97, wherein at least one element on the web-page is characterized by a bounding shape defined by the script code, and wherein the shape provides a reference point from which various parts of the element may be located with on the web-page.

101. (New) A method as recited by claim 97, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

February 9, 2004

102. (New) A method as recited by claim 97, wherein the script code embedded within each user's web-page further adds interactive functionality to the web-page by:

determining the identifier of the particular element that is the subject of actions by the second user;

transmitting the identifier from the second user's computing device to the first user's computing device; and

locating the element corresponding to the identifier received from the second user's computing device on the first user's web page, so that actions of the second user can be communicated to the first user.

0

103. (New) A method as recited by claim 87, wherein the one or more movements of the first user's cursor are displayed on the second user's web page by:

analyzing the web page to assign a unique identifier to one or more elements of the web-page, so that the elements of the web-page of the first user and the second user are assigned the same identifiers;

storing each identifier;

determining the first user's cursor position by obtaining cursor coordinate data as the first user causes the cursor to move over the displayed web-page;

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the first user's cursor is positioned;

February 9, 2004

transmitting the cursor coordinate data and identifier for the element over which the first user's cursor is positioned to the second user's computing device; and

locating the corresponding element on the second user's web page by using the identifier, so that the second user can perceive the first user's cursor position on the displayed web-page.

104. (New) A method as recited by claim 103, wherein the analyzing step further comprises constructing a tree, wherein the nodes of the tree correspond to the elements of the web page, each node being assigned a unique identifier, and storing the tree in a data file on the computing device of the first user and the second user, and the comparing step further comprises comparing the cursor coordinate data with the stored tree, and the locating step further comprises parsing the tree to locate the element corresponding to the identifier.

105. (New) A method as recited by claim 104, wherein one or more elements is identifiable by one or more HTML tags provided in the HTML code that defines the web-page and one or more HTML tags is assigned a unique identifier.

106. (New) A method as recited by claim 103, wherein the one or more movements of each user's cursor are displayed on the other user's web page by:

determining the second user's cursor position by obtaining cursor coordinate data as the second user causes the cursor to move over the displayed web-page;

- 35 -

February 9, 2004

comparing the cursor coordinate data with the stored one or more identifiers to determine the element over which the second user's cursor is positioned;

transmitting the cursor coordinate data and identifier for the element over which the second user's cursor is positioned to the first user's computing device; and

locating the element corresponding to the identifier received from the second user's computing device on the first user's web-page, so that the first user can perceive the second user's cursor position on the displayed web-page.

()

107. (New) A system for adding interactive functionality to a web-page requested by a first user having a computing device connectable to the Internet using an Internet browser on first user's computing device, the Internet browser enabling the first user to cause the computing device to establish a connection to the Internet and to request and receive web-pages, said system comprising:

a server, the first user computing device being connectable to said server using the Internet browser, said server being operable in connection with software loaded on the server for receiving a request from the first user for the web-page, said server further being operable in connection with the software for retrieving the requested web-page and inserting, within the requested web-page, a reference to script code to add interactive functionality to the web-page, said server further being operable in connection with the software for transmitting the requested web-page having the inserted reference to the first user's computing device.

February 9, 2004

108. (New) A computer readable medium comprising computer code for instructing one or more processors to add interactive functionality to a web-page by:

receiving a request for the web-page from a user;

retrieving the requested web-page;

inserting, within the requested web-page, a reference to script code to add interactive functionality to the requested web-page; and

transmitting the requested web-page having the inserted reference to the user.

(B)

- 109. (New) The computer readable medium as recited by claim 108, further comprising parsing the requested web-page to determine an appropriate location to insert the reference.
- 110. (New) The computer readable medium as recited by claim 108, further comprising storing the script code on at least one of the first user's computing device and the second user's computing device prior to using the reference to embed the script code within the requested webpage.
- 111. (New) A computer readable medium comprising computer code for instructing one or more processors to facilitate interaction between a first user viewing a web-page and a second user viewing the same web-page by:

providing the web-page to each of the first user and the second user, the web-page having a reference to script code insertable to provide interactive functionality to the web-page;

February 9, 2004

using the reference to embed the script code within the web-page;

receiving cursor coordinate data from one of the first or second user; and

transmitting the received cursor coordinate data to the other one of the first or
second user.

112. (New) A system for facilitating interaction between a first user viewing a web-page and a second user viewing the web-page, said system comprising:

a server operable in connection with software loaded on the server for providing the web-page to each of the first user and the second user, the web-page having insertable a reference to script code to provide interactive functionality to the web-page, said server being further operable in connection with the software for using the reference to embed the script code within web-page; said server and said script code being further operable in connection with the software for receiving cursor coordinate data from one of the first or second user, said server and said script code being further operable in connection with the software for transmitting the received cursor coordinate data to the other one of the first or second user.

113. (New) A method as recited by claim 47, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display, and wherein the script code further adds interactive functionality to display the position of the first user's cursor within a particular element on the web-page of the second user by:

February 9, 2004

determining a particular portion of an element to which the first user's cursor is pointing by obtaining cursor coordinate data corresponding to the position of the first user's cursor within the particular element by obtaining the first user's cursor position relative to a reference point associated with the bounding shape on the first user's web page;

transmitting the identifier for the particular element along with the relative cursor coordinate data to the second user's computing device; and

locating the position of the first user's cursor relative to the corresponding element on the second user's web page by using the identifier to determine the corresponding element and applying the relative cursor coordinate data to a corresponding reference point associated with a bounding shape associated with the corresponding element on the second user's web page, so that the position of the first user's cursor can be perceived by the second user.

114. (New) A method as recited by claim 100, the first user's computing device having a cursor control device to control movement of a cursor on the first user's display, and wherein the script code further adds interactive functionality to display the position of the first user's cursor within a particular element on the web-page of the second user by:

determining a particular portion of an element to which the first user's cursor is pointing by obtaining cursor coordinate data corresponding to the position of the first user's cursor within the particular element by obtaining the first user's cursor position relative to a reference point associated with the bounding shape on the first user's web page;

February 9, 2004

transmitting the identifier for the particular element along with the relative cursor coordinate data to the second user's computing device; and

locating the position of the first user's cursor relative to the corresponding element on the second user's web page by using the identifier to determine the corresponding element and applying the relative cursor coordinate data to a corresponding reference point associated with a bounding shape associated with the corresponding element on the second user's web page, so that the position of the first user's cursor can be perceived by the second user.

115. (New) A method as recited by claim 2, wherein the same script code is embedded within the web-page requested by the first user and the second user.

- 116. (New) A method as recited by claim 2, wherein the script code embedded within the webpage requested by the first user differs from the script code embedded within the web-page requested by the second user.
- 117. (New) A method as recited by claim 11, wherein the same script code is embedded within the web-page provided to the first user and the second user.
- 118. (New) A method as recited by claim 11, wherein the script code embedded within the web-page provided to the first user differs from the script code embedded within the web-page provided to the second user.

- 40 -

February 9, 2004

119. (New) A system as recited by claim 17, wherein the same script code is embedded within the web-page requested by the first user and the second user.

120. (New) A system as recited by claim 17, wherein the script code embedded within the web-page requested by the first user differs from the script code embedded within the web-page requested by the second user.

121. (New) A method as recited by claim 76, wherein the same reference is inserted within the web-page requested by the first user and the second user.

(h)

122. (New) A method as recited by claim 76, wherein the reference inserted within the webpage requested by the first user differs from the reference inserted within the web-page requested by the second user.

- 123. (New) A method as recited by claim 80, wherein the same script code is embedded within the web-page requested by the first user and the second user.
- 124. (New) A method as recited by claim 80, wherein the script code embedded within the web-page requested by the first user differs from the script code embedded within the web-page requested by the second user.